

SYSTEM AND METHOD FOR CREATING COMPOSITE IMAGES OF A
GEOGRAPHIC LOCATION

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ABSTRACT OF THE DISCLOSURE

A system and method synthesizing images of a locale to generate a composite image that provide a panoramic view of the locale. A video camera moves along a street recording images 10 of objects along the street. A GPS receiver and inertial navigation system provide the position of the camera as the images are being recorded. The images are indexed with the position data provided by the GPS receiver and inertial 15 navigation system. The composite image is created on a column-by-column basis by determining which of the acquired images contains the desired pixel column, extracting the pixels associated with the column, and stacking the columns side by side. The composite images are stored in an image database and 20 associated with a street name and number range of the street being depicted in the image. The image database covers a substantial amount of a geographic area allowing a user to visually navigate the area from a user terminal.

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